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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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ATLANTA, GA 30309-3915		

EXAMINER
THERKORN, ERNEST G

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
02/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,092

Applicant(s)

SCHRAMM ET AL.

Examiner

Ernest G. Therkorn

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24). The claims are considered to read on Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24). However, if a difference exists between the claims and Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24), it would reside in optimizing the steps of Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24). It would have been obvious to optimize the steps of Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) to enhance separation.

Claims 2, 3, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) as applied to claims 1-13 above, and further in view of Nicoud (U.S. Patent No. 5,422,007). At best, the claims differ from Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) in reciting temperature and pressure changes. Nicoud (U.S. Patent No. 5,422,007)

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(column 8, line 49-column 9, line 14) discloses that varying the temperature and pressure allows for a varying of the eluting power of the eluting fluid. It would have been obvious to change temperature and pressure because Nicoud (U.S. Patent No. 5,422,007) (column 8, line 49-column 9, line 14) discloses that varying the temperature and pressure allows for a varying of the eluting power of the eluting fluid.

Claims 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) as applied to claims 1-13 above, and further in view of Jensen (WO 00/33934). At best, the claims differ from Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) in reciting that the solvents have different compositions. Jensen (WO 00/33934) (page 2, line 35-page 3, line 29) discloses use of solvents with different capabilities makes it possible to achieve considerable saving in organic solvent. It would have been obvious to use different compositions in Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) because Jensen (WO 00/33934) (page 2, line 35-page 3, line 29) discloses use of solvents with different capabilities makes it possible to achieve considerable saving in organic solvent.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) as applied to claims 1-13 above, and further in view of Funk (U.S. Patent No. 5,618,972). At best, the claim differs from Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) in reciting a chemical reaction. Funk (U.S. Patent No. 5,618,972) (column 3, lines 24-30) discloses that reactive chromatography in a simulated moving bed allows the reaction to proceed and

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separation of at least one component at the same time. It would have been obvious to have reactive chromatography in Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) because Funk (U.S. Patent No. 5,618,972) (column 3, lines 24-30) discloses that reactive chromatography in a simulated moving bed allows the reaction to proceed and separation of at least one component at the same time.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) as applied to claims 1-13 above, and further in view of Kearney (U.S. Patent No. 5,102,533). At best, the claim differs from Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) in reciting varying the flow volume. Kearney (U.S. Patent No. 5,102,533) (column 2, lines 41-55 and column 3, lines 23-29) discloses that varying the flow volume allows "increased production, increase component recovery, and/or increase component stream purity." It would have been obvious to vary the flow volume in Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) because Kearney (U.S. Patent No. 5,102,533) (column 2, lines 41-55 and column 3, lines 23-29) discloses that varying the flow volume allows "increased production, increase component recovery, and/or increase component stream purity."

The remarks urge patentability based upon the allegation that varying concentration of the input within a cyclical time unit is not disclosed by Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24). However, varying concentration of the input is disclosed by Mazzotti (Journal of Chromatography, 769 (1997), pages 3-24) in the second full paragraph of column 1 on page 23 of Mazzotti (Journal of

Chromatography, 769 (1997), pages 3-24).

The remarks urge patentability based upon page 11, lines 26-36 of the specification. However, the text appears to be directed to a Langmuir isotherm equation.

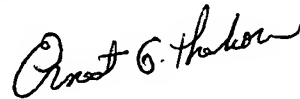
The remarks urge that Nicoud (U.S. Patent No. 5,422,007) teaches away from temperature and pressure changes. Nicoud (U.S. Patent No. 5,422,007) (column 8, line 49-column 9, line 14) discloses that varying the temperature and pressure allows for a varying of the eluting power of the eluting fluid. Motivation exists to change temperature and pressure because Nicoud (U.S. Patent No. 5,422,007) (column 8, line 49-column 9, line 14) discloses that varying the temperature and pressure allows for a varying of the eluting power of the eluting fluid.

The remarks appear to urge that Jensen (WO 00/33934) does not disclose different solvents for the feedstream and desorbent stream. However, Jensen (WO 00/33934) discloses different solvents for the feedstream and desorbent stream on page 3, lines 4 and 5.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



Ernest G. Therkorn
Primary Examiner
Art Unit 1723

EGT
February 1, 2008